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<150> 09/152,060

<151> 1998-09-11

<150> PCT/US98/04858

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<151> 1997-06-06

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<170> PatentIn Ver. 2.0

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<211> 736

<212> DNA
<213> Homo sapiens

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<222> (701)
<223> n equals a,t,g, or c

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<211> 1688
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens
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<222> (2041)  
<223> n equals a,t,g, or c
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<211> 1101

<212> DNA

<213> Homo sapiens

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<210> 24

<211> 1659

<212> DNA

<213> Homo sapiens

<400> 24

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<210> 28

<211> 2361

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (2361)

<223> n equals a,t,g, or c

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<210> 30
 <211> 1732
 <212> DNA
 <213> Homo sapiens

<400> 30						
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<210> 31 .
<211> 3259
<212> DNA
<213> Homo sapiens
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<210> 32
<211> 454
<212> DNA
<213> Homo sapiens
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<400> 32							
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gttatattaa	aaaaaatcaa	ggtgctggga	ttacaggcgt	gagccaccgc	gcccggctgt		240
agccccctgtc	tttattcctc	ccctgtctaa	cccgtcctca	gcatgaatgc	cagagttacc		300
tcttaaawta	tgtcagggtg	ctaggcacag	tggctcatgc	ctgtaatccc	agctcttggg		360
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<210> 33
<211> 230
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (219)
<223> n equals a,t,g, or c
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gccctgtgagg tcagggaaggc aaggttgcca ctagggtgta ctgtggggcc  cacatgcccgc      180
catgctgttc acccttcaaa qqqtggcatc tcagcccang cagtccctct      230
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<210> 34
<211> 753
<212> DNA
<213> Homo sapiens
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<400> 34
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qtgctattcg tctctttaac gaatgtccag ggacctggtc tgactgattg gttatttccc    120
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aggagatgtc	ccaaaatcag	agaagaatgt	gaattccaag	aaagggatgt	gtgtacaaag	180
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gatctcaaac	aagatgtatg	cgaaatgcc	aaagaaactg	gcccctgcct	ggcttatttt	300
cttcattggt	ggtatgacaa	gaaagataat	acttgctcca	tgtttgtcta	tggtggctgc	360
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tccaagatct	tagcccttcc	cagaacagaa	cgcttgcatc	tacctcctct	tcctccatct	600
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<210> 35
 <211> 1022
 <212> DNA
 <213> Homo sapiens

<400> 35						
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agwgtaccaa	gaggctatgt	tagcctgcaa	aaccccaaag	aagactgttt	sctccagatt	240
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tgattttaaa	aatcgagctg	agatgataga	tttcaatatc	cggatcaaaa	atgtgacaag	360
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tggctcccaa	agcaccaaca	gctcatacac	aatgaataca	aaaactggaa	ctctgcaatt	660
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tc						1022

<210> 36
 <211> 3044
 <212> DNA
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (2383)
 <223> n equals a,t,g, or c

<400> 36						
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cagaacacat	tgtacaggta	gccagggtgc	ggtctccagc	ctgagaactc	tggtgttgt	300
tccttgtgtc	gtcccatatt	cctgcctggc	ctgcgatgga	catcagcaag	ggcctcccag	360
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<210> 37
 <211> 541
 <212> DNA
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (420)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (486)

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 aaaaaaagaa aa 1752

<210> 39
 <211> 1907
 <212> DNA
 <213> Homo sapiens

<400> 39
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 gcgagatagt tgccctcaag aagggtggccc taaggcgggtt ggaagacggc tccctaacc 180
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 <212> DNA
 <213> Homo sapiens

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<211> 1114

<212> DNA

<213> Homo sapiens

<400> 41

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 <213> Homo sapiens

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 <223> n equals a,t,g, or c

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 <223> n equals a,t,g, or c

<220>
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 <211> 1473
 <212> DNA

<400> 43

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<210> 44
<211> 772
<212> DNA
<213> Homo sapiens
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<400> 44

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<211> 403
<212> DNA
<213> Homo sapiens
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$\langle 220 \rangle$

<221> SITE

<222> (15)

<223> n equals a,t,g, or c

<400> 45

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<211> 928

<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (78)

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<220>

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<222> (148)

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<220>

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<222> (163)

<223> n equals a,t,g, or c

<220>

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<223> n equals a,t,g, or c

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<210> 47  
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<212> DNA  
<213> Homo sapiens
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<210> 48
<211> 2315
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (2315)
<223> n equals a,t,g, or c
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 <212> DNA
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caagcagacc	agtcaccatc	aaaatttcta	gataataact	ctcccagctg	ttctggagggt	2640
gtgcaggaac	atcaacaatc	gttattgggt	ctttattttt	gctagaagaa	gtatctgggt	2700
tgtcttcata	accttcaaat	tcttcatcat	catatggttc	actctcagta	tctccctcct	2760
gggtatctgc	atcttcaaaa	tctccttctt	ggttttcatc	ctgcccttcc	aactccacag	2820
tggtctcatc	ttcatcatct	tcagtgatta	tgaccggttg	aggagattca	gtaacagagt	2880
cttccatgac	atcctcaaat	tcagcgaagt	cattatcatc	atactctact	atgtcctcct	2940
catcctcaaa	atcatcaaac	ttggcttcag	agacactccc	aaacaccaga	aggacaacac	3000
agaaagtgtg	gaaggctttc	attgcacctt	gagaaaaaaa	gctgtggccg	aagccgaaac	3060
ccggcccagc	gccctgcgtc	cgacaccctt	gcccggcctg	ctctcggcct	ggccgcccgc	3120
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<210> 50
 <211> 783
 <212> DNA
 <213> Homo sapiens

<400> 50						
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aggagatgtc	ccaaaatcag	agaagaatgt	gaattccaag	aaagggatgt	gtgtacaaag	180
gacagacaat	gccaggacaa	caagaagtgt	tgtgtcttca	gctgcggaaa	aaaatgttta	240
gatctcaaac	aagatgtatg	cgaaatgcc	aaagaaactg	gcccctgcct	ggcttatttt	300
cttcattggt	ggtatgacaa	gaaagataat	acttgtctca	tgtttgtcta	tggtggctgc	360
caggggaaac	aataacaact	tccaatccaa	agccaactgc	ctgaacacct	gcaagaataa	420
acgctttccc	tgattggata	aggatgcact	ggaagaactg	ccagaatgtg	gctcatgctc	480
tgagtactgt	tcctgtacct	gactgatgct	ccagactggc	ttccagtttc	actctcagca	540
ttccaagatc	ttagcccttc	ccagaacaga	acgcttgcat	ctacctcttc	ttcctccatc	600
tttggctctt	ttgatgcaca	atatccatcc	gttttgattt	catcttttat	ttcccttttat	660
ctccaacttc	tagaactccc	agttttatac	tgtgtcactc	tcaatttttt	ccagtaaagt	720
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aat						783

<210> 51
 <211> 3030

<213> Homo sapiens

<221> SITE

<222> (60)

<223> n equals a,t,q, or c

<221> SITE

<222> (2388)

<223> n equals a,t,g, or c

<400> 51

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gcagtgcaaa	ggtctgcaga	caacgacctg	ggcgctttca	agggacacaa	ggaatcatat	240
tgccagaaca	cattgtacag	gtagccaggt	gtcgggtctc	agcctgagaa	ctctggctgt	300
tgttctctgt	gtcgctccat	attctgcct	ggcctgcgat	ggacatcagc	aagggcctcc	360
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ccgagggggc	ttacgggaac	tttttcgagg	aacactgcta	tgtcatcctc	cacgtccccc	480
agagcccgaa	ggycacgcag	ggggcgctca	gcgacctgca	ctactgggtc	gggaagcagg	540
cgggtgcgga	agcgcagggc	gctgcggagg	ccttccagca	gcgcttacag	gacgagctgg	600
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tggaggtggt	gaacgacggc	gcgagtcgg	ccgcgttcaa	gcagctcttc	cggacttgggt	1380
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ccaagcgtca	tggcacagctg	tgtgcaggca	actgctacct	tgtgctctac	acataccaga	1620
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acctctgggt	tgggaaaggg	ctgtaatggt	gatcagcgtg	agatggcâcg	ggtgggtggtc	2040
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<210> 52
<211> 61
<212> PRT
<213> Homo sapiens
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<400> 52
Met Glu His Ala Ala Gly Leu Pro Val Thr Arg His Pro Leu Ala Leu
  1                      5                      10                      15

Leu Leu Ala Leu Cys Pro Gly Pro Phe Pro Ala Leu Leu Leu Pro Leu
      20                      25                      30

Leu Pro Trp Gly Tyr Pro Leu Ala Pro Pro Gly Leu Cys Lys Leu Pro
      35                      40                      45

Gln Gly Ala Pro Leu Pro Cys Ser Ser Xaa Leu Thr Ser
      50                      55                      60

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<210> 53
<211> 243
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (190)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 53
Met Asp Gln Tyr Cys Ile Leu Gly Arg Ile Gly Glu Gly Ala Xaa Gly
  1             5             10             15

Ile Val Phe Lys Ala Lys His Val Glu Thr Gly Glu Ile Val Ala Leu
          20             25             30

Lys Lys Val Ala Leu Arg Arg Leu Glu Asp Gly Phe Pro Asn Gln Ala
  35             40             45

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Leu Arg Glu Ile Lys Ala Leu Gln Glu Met Glu Asp Asn Gln Tyr Val
50 55 60

Val Gln Leu Lys Ala Val Phe Pro His Gly Gly Gly Phe Val Leu Ala
65 70 75 80

Phe Glu Phe Met Leu Ser Asp Leu Ala Glu Val Val Arg His Ala Gln
85 90 95

Arg Pro Leu Ala Gln Ala Gln Val Lys Ser Tyr Leu Gln Met Leu Leu
100 105 110

Lys Gly Val Ala Phe Cys His Ala Asn Asn Ile Val His Arg Asp Leu
115 120 125

Lys Pro Ala Asn Leu Leu Ile Ser Ala Ser Gly Gln Leu Lys Ile Ala
130 135 140

Asp Phe Gly Leu Ala Arg Val Phe Ser Pro Asp Gly Ser Arg Leu Tyr
145 150 155 160

Thr His Gln Val Ala Thr Arg Ser Ser Leu Ser Cys Arg Thr Thr Thr
165 170 175

Arg Ser Pro Leu Arg Ser Arg Cys Pro Cys Pro Trp Arg Xaa Cys Cys
180 185 190

Leu Thr Ser Leu Pro Arg His Trp Ile Cys Trp Val Asn Ser Phe Ser
195 200 205

Thr Leu Leu Thr Ser Ala Ser Gln Leu Pro Arg Leu Ser Ser Ile Ser
210 215 220

Thr Ser Ser Gln Leu Pro Cys Leu Pro Ile His Leu Ser Cys Arg Phe
225 230 235 240

Leu Ser Val

<210> 54

<211> 65

<212> PRT

<213> Homo sapiens

<400> 54

Met Glu Ala Lys Phe Gly Leu Leu Cys Phe Leu Val Ser Thr Pro Trp
1 5 10 15

Ala Glu Leu Leu Ser Leu Leu Leu His Leu Thr Gln Val Pro Phe Pro
20 25 30

Gly Ser Gln Gly Leu Gly Leu Asn Asn Cys Arg Ala Ala Cys His Asp
35 40 45

Leu Ser His Leu Leu Leu Ser His Ser Ala Ile Asn Gln Thr Lys Glu
50 55 60

Phe
65

<210> 55
<211> 37
<212> PRT
<213> Homo sapiens

<400> 55
Met Leu Ala Arg Lys Ala Glu Arg Gly Ser Met Gly Thr Ala Arg Asp
1 5 10 15
Ser His Ile Leu Leu Val Cys Ser Val Val His Pro Ala Ser Ala Gln
20 25 30
Pro Val Tyr Thr Val
35

<210> 56
<211> 317
<212> PRT
<213> Homo sapiens

<400> 56
Met Leu Ser Phe Lys Leu Leu Leu Leu Ala Val Ala Leu Gly Phe Phe
1 5 10 15
Glu Gly Asp Ala Lys Phe Gly Glu Arg Asn Glu Gly Ser Gly Ala Arg
20 25 30
Arg Arg Arg Cys Leu Asn Gly Asn Pro Pro Lys Arg Leu Lys Arg Arg
35 40 45
Asp Arg Arg Met Met Ser Gln Leu Glu Leu Leu Ser Gly Gly Glu Met
50 55 60
Leu Cys Gly Gly Phe Tyr Pro Arg Leu Ser Cys Cys Leu Arg Ser Asp
65 70 75 80
Ser Pro Gly Leu Gly Arg Leu Glu Asn Lys Ile Phe Ser Val Thr Asn
85 90 95
Asn Thr Glu Cys Gly Lys Leu Leu Glu Glu Ile Lys Cys Ala Leu Cys
100 105 110
Ser Pro His Ser Gln Ser Leu Phe His Ser Pro Glu Arg Glu Val Leu
115 120 125
Glu Arg Asp Leu Val Leu Pro Leu Leu Cys Lys Asp Tyr Cys Lys Glu
130 135 140
Phe Phe Tyr Thr Cys Arg Gly His Ile Pro Gly Phe Leu Gln Thr Thr
145 150 155 160
Ala Asp Glu Phe Cys Phe Tyr Tyr Ala Arg Lys Asp Gly Gly Leu Cys
165 170 175

Leu Asp Gly Leu Ser Leu Pro Ala Pro Lys Leu Leu Thr Ala Ser Leu

45

<400> 60																
Met	Ala	Val	Leu	Ala	Pro	Leu	Ile	Ala	Leu	Val	Tyr	Ser	Val	Pro	Arg	
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Leu	Ser	Arg	Trp	Leu	Ala	Gln	Pro	Tyr	Tyr	Leu	Leu	Ser	Ala	Leu	Leu	
			20					25					30			
Ser	Ala	Ala	Phe	Leu	Leu	Val	Arg	Lys	Leu	Pro	Pro	Leu	Cys	His	Gly	
		35					40					45				
Leu	Pro	Thr	Gln	Arg	Glu	Asp	Gly	Asn	Pro	Cys	Asp	Phe	Asp	Trp	Arg	
	50					55					60					
Glu	Val	Glu	Ile	Leu	Met	Phe	Leu	Ser	Ala	Ile	Val	Met	Met	Lys	Asn	
65					70					75					80	
Arg	Arg	Ser	Ile	Thr	Val	Glu	Gln	His	Ile	Gly	Asn	Ile	Phe	Met	Phe	
				85					90					95		
Ser	Lys	Val	Ala	Asn	Thr	Ile	Leu	Phe	Phe	Arg	Leu	Asp	Ile	Arg	Met	
			100					105					110			
Gly	Leu	Leu	Tyr	Ile	Thr	Leu	Cys	Ile	Val	Phe	Leu	Met	Thr	Cys	Lys	

115					120					125					
Pro	Pro	Leu	Tyr	Met	Gly	Pro	Glu	Tyr	Ile	Lys	Tyr	Phe	Asn	Asp	Lys
	130					135					140				
Thr	Ile	Asp	Glu	Glu	Leu	Glu	Arg	Asp	Lys	Arg	Val	Thr	Trp	Ile	Val
145					150					155					160
Glu	Phe	Phe	Ala	Asn	Trp	Ser	Asn	Asp	Cys	Gln	Ser	Phe	Ala	Pro	Ile
				165					170					175	
Tyr	Ala	Asp	Leu	Ser	Leu	Lys	Tyr	Asn	Cys	Thr	Gly	Leu	Asn	Phe	Gly
			180					185					190		
Lys	Val	Asp	Val	Gly	Arg	Tyr	Thr	Asp	Val	Ser	Thr	Arg	Tyr	Lys	Val
		195					200					205			
Ser	Thr	Ser	Pro	Leu	Thr	Lys	Gln	Leu	Pro	Thr	Leu	Ile	Leu	Phe	Gln
	210					215					220				
Gly	Gly	Lys	Glu	Ala	Met	Arg	Arg	Pro	Gln	Ile	Asp	Lys	Lys	Gly	Arg
225					230					235					240
Ala	Val	Ser	Trp	Thr	Phe	Ser	Glu	Glu	Asn	Val	Ile	Arg	Glu	Phe	Asn
				245					250					255	
Leu	Asn	Glu	Leu	Tyr	Gln	Arg	Ala	Lys	Lys	Leu	Ser	Lys	Ala	Gly	Asp
			260					265					270		
Asn	Ile	Pro	Glu	Glu	Gln	Pro	Val	Xaa	Ser	Thr	Pro	Thr	Thr	Val	Ser
		275					280					285			
Asp	Gly	Glu	Asn	Lys	Lys	Asp	Lys								
	290					295									
<210> 61															
<211> 100															
<212> PRT															
<213> Homo sapiens															
<400> 61															
Met	Arg	Ala	Phe	Arg	Lys	Asn	Lys	Thr	Leu	Gly	Tyr	Gly	Val	Pro	Met
1				5					10					15	
Leu	Leu	Leu	Ile	Val	Gly	Gly	Ser	Phe	Gly	Leu	Arg	Glu	Phe	Ser	Gln
			20					25					30		
Ile	Arg	Tyr	Asp	Ala	Val	Lys	Ser	Lys	Met	Asp	Pro	Glu	Leu	Glu	Lys
		35					40					45			
Lys	Leu	Lys	Glu	Asn	Lys	Ile	Ser	Leu	Glu	Ser	Glu	Tyr	Glu	Lys	Ile
	50					55					60				
Lys	Asp	Ser	Lys	Phe	Asp	Asp	Trp	Lys	Asn	Ile	Arg	Gly	Pro	Arg	Pro
	65				70					75					80
Trp	Glu	Asp	Pro	Asp	Leu	Leu	Gln	Gly	Arg	Asn	Pro	Glu	Ser	Leu	Lys

85

90

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Thr Lys Thr Thr
100

<210> 62
<211> 47
<212> PRT
<213> Homo sapiens

<400> 62
Met Ile Gln Leu Ile Leu Gln Phe Trp Tyr Leu Phe Ser Met Leu Leu
1 5 10 15

Lys Pro Val Gln Gln Cys Gln His Cys Ser Gln Ile Thr Pro Ser Gly
20 25 30

Thr Met Pro Thr Ser Glu Thr Val Phe Leu Ile Leu Phe Leu Pro
35 40 45

<210> 63
<211> 162
<212> PRT
<213> Homo sapiens

<400> 63
Met Lys Met Val Ala Pro Trp Thr Arg Phe Tyr Ser Asn Ser Cys Cys
1 5 10 15

Leu Cys Cys His Val Arg Thr Gly Thr Ile Leu Leu Gly Val Trp Tyr
20 25 30

Leu Ile Ile Asn Ala Val Val Leu Leu Ile Leu Leu Ser Ala Leu Ala
35 40 45

Asp Pro Asp Gln Tyr Asn Phe Ser Ser Ser Glu Leu Gly Gly Asp Phe
50 55 60

Glu Phe Met Asp Asp Ala Asn Met Cys Ile Ala Ile Ala Ile Ser Leu
65 70 75 80

Leu Met Ile Leu Ile Cys Ala Met Ala Thr Tyr Gly Ala Tyr Lys Gln
85 90 95

Arg Ala Ala Gly Ile Ile Pro Phe Phe Cys Tyr Gln Ile Phe Asp Phe
100 105 110

Ala Leu Asn Met Leu Val Ala Ile Thr Val Leu Ile Tyr Pro Asn Ser
115 120 125

Ile Gln Glu Tyr Ile Arg Gln Leu Pro Pro Asn Phe Pro Tyr Arg Asp
130 135 140

Asp Val Met Cys Ser Glu Ser Tyr Leu Phe Gly Pro Tyr Tyr Ser Ser
145 150 155 160

Val Tyr

<210> 64

<211> 335

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (297)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 64

Met Arg Gly Leu Gly Leu Trp Leu Leu Gly Ala Met Met Leu Pro Ala
1 5 10 15

Ile Ala Pro Ser Arg Pro Trp Ala Leu Met Glu Gln Tyr Glu Val Val
20 25 30

Leu Pro Xaa Arg Leu Pro Gly Pro Arg Val Arg Arg Ala Leu Pro Ser
35 40 45

His Leu Gly Leu His Pro Glu Arg Val Ser Tyr Val Leu Gly Ala Thr
50 55 60

Gly His Asn Phe Thr Leu His Leu Arg Lys Asn Arg Asp Leu Leu Gly
65 70 75 80

Ser Gly Tyr Thr Glu Thr Tyr Thr Ala Ala Asn Gly Ser Glu Val Thr
85 90 95

Glu Gln Pro Arg Gly Gln Asp His Cys Phe Tyr Gln Gly His Val Glu
100 105 110

Gly Tyr Pro Asp Ser Ala Ala Ser Leu Ser Thr Cys Ala Gly Leu Arg
115 120 125

Gly Phe Phe Gln Val Gly Ser Asp Leu His Leu Ile Glu Pro Leu Asp
130 135 140

Glu Gly Gly Glu Gly Gly Arg His Ala Val Tyr Gln Ala Glu His Leu
145 150 155 160

Leu Gln Thr Ala Gly Thr Cys Gly Val Ser Asp Asp Ser Leu Gly Ser
165 170 175

Leu Leu Gly Pro Arg Thr Ala Ala Val Phe Arg Pro Arg Pro Gly Asp
180 185 190

Ser Leu Pro Ser Arg Glu Thr Arg Tyr Val Glu Leu Tyr Val Val Val
195 200 205

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Asp	Asn	Ala	Glu	Phe	Gln	Met	Leu	Gly	Ser	Glu	Ala	Val	Arg	His	
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Arg	Val	Leu	Glu	Val	Val	Asn	His	Val	Asp	Lys	Leu	Tyr	Gln	Lys	Leu
225					230					235					240
Asn	Phe	Arg	Val	Val	Leu	Val	Gly	Leu	Glu	Ile	Trp	Asn	Ser	Gln	Asp
				245					250					255	
Arg	Phe	His	Val	Ser	Pro	Asp	Pro	Ser	Val	Thr	Leu	Glu	Asn	Leu	Leu
			260					265					270		
Thr	Trp	Gln	Ala	Arg	Gln	Arg	Thr	Arg	Arg	His	Leu	His	Asp	Asn	Val
		275					280					285			
Gln	Leu	Ile	Thr	Gly	Val	Asp	Phe	Xaa	Gly	Thr	Thr	Val	Gly	Phe	Ala
	290					295					300				
Arg	Val	Ser	Thr	Met	Cys	Ser	His	Ser	Ser	Gly	Ala	Val	Asn	Gln	Asp
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His	Ser	Lys	Asn	Pro	Val	Gly	Val	Ala	Cys	Thr	Met	Ala	His	Glu	
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Glu	Ala	Pro	His	Met	Asn	Tyr	Arg	Asp	Arg	Asp	Ala	His	Ala	Val	Asp
			20					25					30		
Phe	Arg	Gly	Arg	Asp	Ala	Pro	Pro	Ser	Asp	Phe	Arg	Gly	Arg	Gly	Thr
		35					40					45			
Tyr	Asp	Leu	Asp	Phe	Arg	Gly	Arg	Asp	Gly	Ser	His	Ala	Asp	Phe	Arg
	50					55					60				
Gly	Arg	Asp	Leu	Ser	Asp	Leu	Asp	Phe	Arg	Ala	Arg	Glu	Gln	Ser	Arg
65					70					75					80
Ser	Asp	Phe	Arg	Asn	Arg	Asp	Val	Ser	Asp	Leu	Asp	Phe	Arg	Asp	Lys
				85					90					95	
Asp	Gly	Thr	Gln	Val	Asp	Phe	Arg	Gly	Arg	Gly	Ser	Gly	Thr	Thr	Asp
			100					105					110		
Leu	Asp	Phe	Arg	Asp	Arg	Asp	Thr	Pro	His	Ser	Asp	Phe	Arg	Gly	Arg
		115					120					125			
His	Arg	Ser	Arg	Thr	Asp	Gln	Asp	Phe	Arg	Gly	Arg	Glu	Met	Gly	Ser
130						135					140				

Met Leu Ser Gln Pro Leu Val Gly Ala Gln Arg Arg Arg Arg Ala Val
1 5 10 15

Gly Leu Ala Val Val Thr Leu Leu Asn Phe Leu Val Cys Phe Gly Pro
 20 25 30

Tyr Asn Val Ser His Leu Val Gly Tyr His Gln Arg Lys Ser Pro Trp
 35 40 45

Trp Arg Ser Ile Ala Val Xaa Phe Ser Ser Leu Asn Ala Ser Leu Asp
 50 55 60

Pro Leu Leu Phe Tyr Phe Ser Ser Ser Val Val Arg Arg Ala Phe Gly
 65 70 75 80

Arg Gly Leu Gln Val Leu Arg Asn Gln Gly Ser Ser Leu Leu Gly Arg
 85 90 95

Arg Gly Lys Asp Thr Ala Glu Gly Thr Asn Glu Asp Arg Gly Val Gly
 100 105 110

Gln Gly Glu Gly Met Pro Ser Ser Asp Phe Thr Thr Glu
 115 120 125

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 <211> 77
 <212> PRT
 <213> Homo sapiens

<400> 67
 Met Arg Leu Val Phe Phe Phe Gly Val Ser Ile Ile Leu Val Leu Gly
 1 5 10 15

Ser Thr Phe Val Ala Tyr Leu Pro Asp Tyr Arg Cys Thr Gly Cys Pro
 20 25 30

Arg Ala Trp Asp Gly Met Lys Glu Trp Ser Arg Arg Glu Ala Glu Arg
 35 40 45

Leu Val Lys Tyr Arg Glu Ala Asn Gly Leu Pro Ile Met Glu Ser Asn
 50 55 60

Cys Phe Asp Pro Ser Lys Ile Gln Leu Pro Glu Asp Glu
 65 70 75

<210> 68
 <211> 121
 <212> PRT
 <213> Homo sapiens

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 Met Arg Ile Met Leu Leu Phe Thr Ala Ile Leu Ala Phe Ser Leu Ala
 1 5 10 15

Gln Ser Phe Gly Ala Val Cys Lys Glu Pro Gln Glu Glu Val Val Pro
 20 25 30

Gly Gly Gly Arg Ser Lys Arg Asp Pro Asp Leu Tyr Gln Leu Leu Gln
 35 40 45

Ser Ser Leu Ala Val Trp Met Phe Gly Gly Gly Thr Lys Leu Thr Val

115										120										125									
Leu	Gly	Gln	Pro	Lys	Ala	Ala	Pro	Ser	Val	Thr	Leu	Phe	Pro	Pro	Ser														
130										135										140									
Ser	Glu	Glu	Leu	Gln	Ala	Asn	Lys	Ala	Thr	Leu	Val	Cys	Leu	Ile	Ser														
145										150										155									
Asp	Phe	Tyr	Pro	Gly	Ala	Val	Thr	Val	Ala	Trp	Lys	Ala	Asp	Ser	Ser														
165										170										175									
Pro	Val	Lys	Ala	Gly	Val	Glu	Thr	Thr	Thr	Pro	Ser	Lys	Gln	Ser	Asn														
180										185										190									
Asn	Lys	Tyr	Ala	Ala	Ser	Ser	Tyr	Leu	Ser	Leu	Thr	Pro	Glu	Gln	Trp														
195										200										205									
Lys	Ser	His	Arg	Ser	Tyr	Ser	Cys	Gln	Val	Thr	His	Glu	Gly	Ser	Thr														
210										215										220									
Val	Glu	Lys	Thr	Val	Ala	Pro	Thr	Glu	Cys	Ser																			
225										230										235									
<210> 71																													
<211> 217																													
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<213> Homo sapiens																													
<400> 71																													
Met	Asp	Ser	Gln	Gln	Ala	Ser	Gly	Thr	Ile	Val	Gln	Ile	Val	Ile	Asn														
1										5										10									
Asn	Lys	His	Lys	His	Gly	Gln	Val	Cys	Val	Ser	Asn	Gly	Lys	Thr	Tyr														
20										25										30									
Ser	His	Gly	Glu	Ser	Trp	His	Pro	Asn	Leu	Arg	Ala	Phe	Gly	Ile	Val														
35										40										45									
Glu	Cys	Val	Leu	Cys	Thr	Cys	Asn	Val	Thr	Lys	Gln	Glu	Cys	Lys	Lys														
50										55										60									
Ile	His	Cys	Pro	Asn	Arg	Tyr	Pro	Cys	Lys	Tyr	Pro	Gln	Lys	Ile	Asp														
65										70										75									
Gly	Lys	Cys	Cys	Lys	Val	Cys	Pro	Glu	Glu	Leu	Pro	Gly	Gln	Ser	Phe														
85										90										95									
Asp	Asn	Lys	Gly	Tyr	Phe	Cys	Gly	Glu	Glu	Thr	Met	Pro	Val	Tyr	Glu														
100										105										110									
Ser	Val	Phe	Met	Glu	Asp	Gly	Glu	Thr	Thr	Arg	Lys	Ile	Ala	Leu	Glu														
115										120										125									
Thr	Glu	Arg	Pro	Pro	Gln	Val	Glu	Val	His	Val	Trp	Thr	Ile	Arg	Lys														
130										135										140									
Gly	Ile	Leu	Gln	His	Phe	His	Ile	Glu	Lys	Ile	Ser	Lys	Arg	Met	Phe														

145 150 155 160
 Glu Glu Leu Pro His Phe Lys Leu Val Thr Arg Thr Thr Leu Ser Gln
 165 170 175
 Trp Lys Ile Phe Thr Glu Gly Glu Ala Gln Ile Ser Gln Met Cys Ser
 180 185 190
 Ser Arg Val Cys Arg Thr Glu Leu Glu Asp Leu Val Lys Val Leu Tyr
 195 200 205
 Leu Glu Arg Ser Glu Lys Gly His Cys
 210 215

<210> 72
 <211> 492
 <212> PRT
 <213> Homo sapiens

<400> 72
 Met Lys Ala Phe His Thr Phe Cys Val Val Leu Leu Val Phe Gly Ser
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 Val Ser Glu Ala Lys Phe Asp Asp Phe Glu Asp Glu Glu Asp Ile Val
 20 25 30
 Glu Tyr Asp Asp Asn Asp Phe Ala Glu Phe Glu Asp Val Met Glu Asp
 35 40 45
 Ser Val Thr Glu Ser Pro Gln Arg Val Ile Ile Thr Glu Asp Asp Glu
 50 55 60
 Asp Glu Thr Thr Val Glu Leu Glu Gly Gln Asp Glu Asn Gln Glu Gly
 65 70 75 80
 Asp Phe Glu Asp Ala Asp Thr Gln Glu Gly Asp Thr Glu Ser Glu Pro
 85 90 95
 Tyr Asp Asp Glu Glu Phe Glu Gly Tyr Glu Asp Lys Pro Asp Thr Ser
 100 105 110
 Ser Ser Lys Asn Lys Asp Pro Ile Thr Ile Val Asp Val Pro Ala His
 115 120 125
 Leu Gln Asn Ser Trp Glu Ser Tyr Tyr Leu Glu Ile Leu Met Val Thr
 130 135 140
 Gly Leu Leu Ala Tyr Ile Met Asn Tyr Ile Ile Gly Lys Asn Lys Asn
 145 150 155 160
 Ser Arg Leu Ala Gln Ala Trp Phe Asn Thr His Arg Glu Leu Leu Glu
 165 170 175
 Ser Asn Phe Thr Leu Val Gly Asp Asp Gly Thr Asn Lys Glu Ala Thr
 180 185 190
 Ser Thr Gly Lys Leu Asn Gln Glu Asn Glu His Ile Tyr Asn Leu Trp

145 150 155 160 165 170 175 180 185 190 195 200 205 210 215

195					200					205					
Cys	Ser	Gly	Arg	Val	Cys	Cys	Glu	Gly	Met	Leu	Ile	Gln	Leu	Arg	Phe
210					215					220					
Leu	Lys	Arg	Gln	Asp	Leu	Leu	Asn	Val	Leu	Ala	Arg	Met	Met	Arg	Pro
225					230					235					240
Val	Ser	Asp	Gln	Val	Gln	Ile	Lys	Val	Thr	Met	Asn	Asp	Glu	Asp	Met
			245						250					255	
Asp	Thr	Tyr	Val	Phe	Ala	Val	Gly	Thr	Arg	Lys	Ala	Leu	Val	Arg	Leu
			260					265						270	
Gln	Lys	Glu	Met	Gln	Asp	Leu	Ser	Glu	Phe	Cys	Ser	Asp	Lys	Pro	Lys
		275					280					285			
Ser	Gly	Ala	Lys	Tyr	Gly	Leu	Pro	Asp	Ser	Leu	Ala	Ile	Leu	Ser	Glu
		290				295					300				
Met	Gly	Glu	Val	Thr	Asp	Gly	Met	Met	Asp	Thr	Lys	Met	Val	His	Phe
305					310					315					320
Leu	Thr	His	Tyr	Ala	Asp	Lys	Ile	Glu	Ser	Val	His	Phe	Ser	Asp	Gln
				325					330					335	
Phe	Ser	Gly	Pro	Lys	Ile	Met	Gln	Glu	Glu	Gly	Gln	Pro	Leu	Lys	Leu
			340					345						350	
Pro	Asp	Thr	Lys	Arg	Thr	Leu	Leu	Phe	Thr	Phe	Asn	Val	Pro	Gly	Ser
			355				360					365			
Gly	Asn	Thr	Tyr	Pro	Lys	Asp	Met	Glu	Ala	Leu	Leu	Pro	Leu	Met	Asn
		370				375					380				
Met	Val	Ile	Tyr	Ser	Ile	Asp	Lys	Ala	Lys	Lys	Phe	Arg	Leu	Asn	Arg
385					390					395					400
Glu	Gly	Lys	Gln	Lys	Ala	Asp	Lys	Asn	Arg	Ala	Arg	Val	Glu	Glu	Asn
			405					410						415	
Phe	Leu	Lys	Leu	Thr	His	Val	Gln	Arg	Gln	Glu	Ala	Ala	Gln	Ser	Arg
			420				425						430		
Arg	Glu	Glu	Lys	Lys	Arg	Ala	Glu	Lys	Glu	Arg	Ile	Met	Asn	Glu	Glu
		435					440					445			
Asp	Pro	Glu	Lys	Gln	Arg	Arg	Leu	Glu	Glu	Ala	Ala	Leu	Arg	Arg	Glu
		450				455					460				
Gln	Lys	Lys	Leu	Glu	Lys	Lys	Gln	Met	Lys	Met	Lys	Gln	Ile	Lys	Val
465					470					475					480
Lys	Ala	His	Val	Lys	Pro	Ser	Gln	Arg	Phe	Glu	Phe				
			485						490						

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Met Gly Ser Ser Gly Leu Leu Ser Leu Leu Val Leu Phe Val Leu Leu
1 5 10 15
Ala Asn Val Gln Gly Pro Gly Leu Thr Asp Trp Leu Phe Pro Arg Arg
20 25 30

Cys Pro Lys Ile Arg Glu Glu Cys Glu Phe Gln Glu Arg Asp Val Cys
35 40 45

Thr Lys Asp Arg Gln Cys Gln Asp Asn Lys Lys Cys Cys Val Phe Ser
50 55 60

Cys Gly Lys Lys Cys Leu Asp Leu Lys Gln Asp Val Cys Glu Met Pro
65 70 75 80

Lys Glu Thr Gly Pro Cys Leu Ala Tyr Phe Leu His Trp Trp Tyr Asp
85 90 95

Lys Lys Asp Asn Thr Cys Ser Met Phe Val Tyr Gly Gly Cys Gln Gly
100 105 110

Asn Asn Asn Asn Phe Gln Ser Lys Ala Asn Cys Leu Asn Thr Cys Lys
115 120 125

Asn Lys Arg Phe Pro
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<210> 76
<211> 298
<212> PRT
<213> Homo sapiens

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<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 76
Met Ala Arg Arg Ser Arg His Arg Leu Leu Leu Leu Leu Leu Arg Tyr
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Leu Val Val Ala Leu Gly Tyr His Lys Ala Tyr Gly Phe Ser Ala Pro
20 25 30

Lys Asp Gln Gln Val Val Thr Ala Val Xaa Tyr Gln Glu Ala Ile Leu
35 40 45

Ala Cys Lys Thr Pro Lys Lys Thr Val Xaa Ser Arg Leu Glu Trp Lys
50 55 60

Lys Leu Gly Arg Ser Val Ser Phe Val Tyr Tyr Gln Gln Thr Leu Gln
65 70 75 80

Gly Asp Phe Lys Asn Arg Ala Glu Met Ile Asp Phe Asn Ile Arg Ile
85 90 95

Lys Asn Val Thr Arg Ser Asp Ala Gly Lys Tyr Arg Cys Glu Val Ser

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<222> (233)
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<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

Lys Asp Ile Asn Gln Leu Gln Lys Ala Asn Val Arg Leu Tyr His Val

				245					250					255		
Tyr	Glu	Lys	Gly	Lys	Asp	Leu	Val	Val	Leu	Glu	Leu	Ala	Thr	Pro	Pro	
			260					265					270			
Leu	Thr	Gln	Asp	Leu	Leu	Gln	Glu	Glu	Asp	Phe	Tyr	Ile	Leu	Asp	Gln	
		275					280					285				
Gly	Gly	Phe	Lys	Ile	Tyr	Val	Trp	Gln	Gly	Arg	Met	Ser	Ser	Leu	Gln	
	290					295					300					
Glu	Arg	Lys	Ala	Ala	Phe	Ser	Arg	Ala	Val	Gly	Phe	Ile	Gln	Ala	Lys	
305					310					315					320	
Gly	Tyr	Pro	Thr	Tyr	Thr	Asn	Val	Glu	Val	Val	Asn	Asp	Gly	Ala	Glu	
				325					330					335		
Ser	Ala	Ala	Phe	Lys	Gln	Leu	Phe	Arg	Thr	Trp	Ser	Glu	Lys	Arg	Arg	
			340					345					350			
Arg	Asn	Gln	Lys	Leu	Gly	Gly	Arg	Asp	Lys	Ser	Ile	His	Val	Lys	Leu	
		355					360					365				
Asp	Val	Gly	Lys	Leu	His	Thr	Gln	Pro	Lys	Leu	Ala	Ala	Gln	Leu	Arg	
	370					375					380					
Met	Val	Asp	Asp	Gly	Ser	Gly	Lys	Val	Glu	Val	Trp	Cys	Ile	Gln	Asp	
385					390					395					400	
Leu	His	Arg	Gln	Pro	Val	Asp	Pro	Lys	Arg	His	Gly	Gln	Leu	Cys	Ala	
				405					410					415		
Gly	Asn	Cys	Tyr	Leu	Val	Leu	Tyr	Thr	Tyr	Gln	Arg	Leu	Gly	Arg	Val	
			420					425					430			
Gln	Tyr	Ile	Leu	Tyr	Leu	Trp	Gln	Gly	His	Gln	Ala	Thr	Ala	Asp	Glu	
		435					440					445				
Ile	Glu	Ala	Leu	Asn	Ser	Asn	Ala	Glu	Glu	Leu	Asp	Val	Met	Tyr	Gly	
	450					455					460					
Gly	Val	Leu	Val	Gln	Glu	His	Val	Thr	Met	Gly	Ser	Glu	Pro	Pro	His	
465					470					475					480	
Phe	Leu	Ala	Ile	Phe	Gln	Gly	Gln	Leu	Val	Ile	Phe	Gln	Glu	Arg	Ala	
				485					490					495		
Gly	His	His	Gly	Lys	Gly	Gln	Ser	Ala	Ser	Thr	Thr	Arg	Leu	Phe	Gln	
			500					505					510			
Val	Gln	Gly	Thr	Asp	Ser	His	Asn	Thr	Arg	Thr	Met	Glu	Val	Pro	Ala	
		515					520					525				
Arg	Ala	Ser	Ser	Leu	Asn	Ser	Ser	Asp	Ile	Phe	Leu	Leu	Val	Thr	Ala	
	530					535					540					
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<210> 78
 <211> 39
 <212> PRT
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<400> 78
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 Thr Phe Thr Leu Ser Asn Pro Asn Ser Ser Ser Arg Pro Asp Ser Asp
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 Phe Asn Phe Leu Lys Ala Ile
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<210> 79
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 79
 Met Ala Leu Ser Val Leu Val Leu Leu Leu Leu Ala Val Leu Tyr Glu
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 Gly Ile Lys Val Gly Lys Ala Ser Cys Ser Thr Arg Tyr Trp
 20 25 30

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<400> 80
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 Glu Val Gln Arg Val Arg Cys Pro Tyr Val Gly Asn Ser Ser Gly Arg
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 Lys Ile Trp Phe Gly Phe Ile Leu Arg Ala Ile Lys His
 35 40 45

<210> 81
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 <212> PRT
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<400> 81
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 Ala Glu Leu Leu Ser Leu Leu Leu His Leu Thr Gln Val Pro Phe Pro
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Trp	Leu	Ala	Gln	Pro	Tyr	Tyr	Leu	Leu	Ser	Ala	Leu	Leu	Ser	Ala	Ala	
			20					25					30			
Phe	Leu	Leu	Val	Arg	Lys	Leu	Pro	Pro	Leu	Cys	His	Gly	Leu	Pro	Thr	
		35					40					45				
Gln	Arg	Glu	Asp	Gly	Asn	Pro	Cys	Asp	Phe	Asp	Trp	Arg	Glu	Val	Glu	
	50					55					60					
Ile	Leu	Met	Phe	Leu	Ser	Ala	Ile	Val	Met	Met	Lys	Asn	Arg	Arg	Ser	
65					70					75					80	
Ile	Thr	Val	Glu	Gln	His	Ile	Gly	Asn	Ile	Phe	Met	Phe	Ser	Lys	Val	
				85					90					95		
Ala	Asn	Thr	Ile	Leu	Phe	Phe	Arg	Leu	Asp	Ile	Arg	Met	Gly	Leu	Leu	
			100					105					110			
Tyr	Ile	Thr	Leu	Cys	Ile	Val	Phe	Leu	Met	Thr	Cys	Lys	Pro	Pro	Leu	
		115					120					125				
Tyr	Met	Gly	Pro	Glu	Tyr	Ile	Lys	Tyr	Phe	Asn	Asp	Lys	Thr	Ile	Asp	
	130					135					140					
Glu	Glu	Leu	Glu	Arg	Asp	Lys	Arg	Val	Thr	Trp	Ile	Val	Glu	Phe	Phe	
145					150					155					160	
Ala	Asn	Trp	Ser	Asn	Asp	Cys	Gln	Ser	Phe	Ala	Pro	Ile	Tyr	Ala	Asp	
				165					170						175	

Phe Leu Pro Gly Gly Val Arg Pro Ala Pro Asp Arg Ala Pro Gly
130 135 140

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<220>
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<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 85
Met Arg Ile Met Leu Leu Phe Thr Ala Ile Leu Ala Phe Ser Leu Ala
  1           5           10           15

Gln Ser Phe Gly Ala Val Cys Lys Glu Pro Gln Glu Glu Val Val Pro
      20           25           30

Gly Gly Gly Arg Ser Lys Arg Asp Pro Asp Leu Tyr Gln Leu Leu Gln
    35           40           45

Arg Leu Phe Lys Ser His Ser Ser Leu Glu Gly Leu Leu Lys Ala Leu
  50           55           60

Ser Gln Xaa Ser Thr Asp Pro Lys Glu Ser Thr Ser Pro Glu Lys Arg
  65           70           75           80

Asp Met His Asp Phe Phe Val Gly Xaa Met Gly Lys Arg Ser Val Gln
      85           90           95

Pro Asp Ser Pro Thr Asp Val Asn Gln Glu Asn Val Pro Ser Phe Gly
      100          105          110

Ile Leu Lys Tyr Pro Pro Arg Ala Glu
    115          120

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<210> 86
<211> 25
<212> PRT
<213> Homo sapiens
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<400> 86
Met Val Leu Leu Met Val Trp Val Val Met Ala Val Val Val Glu Ala
  1             5             10             15
Val Glu Val Thr Met Gly Lys Ala Ala
          20             25

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<210> 87
<211> 4

<212> PRT

<213> Homo sapiens

<400> 87

Ser Leu His Ala

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<210> 88

<211> 235

<212> PRT

<213> Homo sapiens

<400> 88

Met	Pro	Trp	Val	Leu	Leu	Leu	Leu	Thr	Leu	Leu	Thr	His	Ser	Ala	Val
1				5					10					15	

Ser	Val	Val	Gln	Ala	Gly	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Lys	Asp
			20					25					30		

Leu	Arg	Gln	Thr	Ala	Thr	Leu	Thr	Cys	Thr	Gly	Asn	Asn	Asn	Asn	Val
	35						40					45			

Gly	Asp	Gln	Gly	Ala	Ala	Trp	Leu	Gln	Gln	His	Gln	Gly	His	Pro	Pro
	50					55					60				

Lys	Leu	Leu	Ser	Tyr	Arg	Asn	Asn	Asn	Arg	Pro	Ser	Gly	Ile	Ser	Glu
65					70				75						80

Arg	Leu	Ser	Ala	Ser	Arg	Ser	Gly	Ala	Thr	Ser	Ser	Leu	Thr	Ile	Thr
			85						90					95	

Gly	Leu	Gln	Pro	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Ala	Ala	Tyr	Asp
			100					105					110		

Ser	Ser	Leu	Ala	Val	Trp	Met	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val
		115					120					125			

Leu	Gly	Gln	Pro	Lys	Ala	Ala	Pro	Ser	Val	Thr	Leu	Phe	Pro	Pro	Ser
	130					135					140				

Ser	Glu	Glu	Leu	Gln	Ala	Asn	Lys	Ala	Thr	Leu	Val	Cys	Leu	Ile	Ser
145					150					155					160

Asp	Phe	Tyr	Pro	Gly	Ala	Val	Thr	Val	Ala	Trp	Lys	Ala	Asp	Ser	Ser
				165					170					175	

Pro	Val	Lys	Ala	Gly	Val	Glu	Thr	Thr	Thr	Pro	Ser	Lys	Gln	Ser	Asn
			180					185					190		

Asn	Lys	Tyr	Ala	Ala	Ser	Ser	Tyr	Leu	Ser	Leu	Thr	Pro	Glu	Gln	Trp
		195					200					205			

Lys	Ser	His	Lys	Ser	Tyr	Ser	Cys	Gln	Val	Thr	His	Glu	Gly	Ser	Thr
	210					215					220				

Val	Glu	Lys	Thr	Val	Ala	Pro	Thr	Glu	Cys	Ser
225					230					235

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<400> 90
Met Ala Leu His Gly Phe His Phe Asp Leu Phe His Phe His Leu Leu
  1             5             10             15

Leu Phe Gln Leu Leu Xaa Leu Thr Pro Gln Cys Ser Leu Leu Gln Pro
      20             25             30

Ala Leu Phe Leu Arg Ile Phe Leu Ile His Asp Ser Leu Leu Leu Cys
      35             40             45

Ser Phe Phe Leu Leu Pro Pro Arg Leu Cys Cys Phe Leu Ser Leu His

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<400> 93
Phe Ser Val Thr Asn Asn Thr Glu Cys Gly Lys Leu Leu Glu Glu Ile
  1                      5                      10                      15
Lys Cys Ala Leu Cys Ser Pro His Ser Gln Ser Leu Phe His Ser Pro
                20                      25                      30

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Glu Arg Asp Lys Arg Val Thr Trp Ile Val Glu Phe Phe Ala Asn Trp
100 105 110

Pro Gly Met Leu Met Gln Pro Trp Ser Met Cys Arg Ile Leu Arg Thr
115 120 125

Leu Leu Arg Ser Arg Val Leu Tyr Pro Asp Gly Gln Xaa Ser Asp Asp
 130 135 140
 Ser Pro Gln Ala Cys Arg Leu Pro Glu Ser Trp Pro Arg Ala Ala Pro
 145 150 155 160
 Ala His His Ser Gly Leu Ser Leu Pro His Arg Leu Asp Arg Gly Met
 165 170 175
 Pro Gly Gly Ser Glu Ala Ala Ala Gly Leu Gln Leu Gln Cys Ser His
 180 185 190
 Ser Lys Met Pro
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<210> 96
 <211> 255
 <212> PRT
 <213> Homo sapiens

<400> 96
 Ile His Leu Ala Leu Val Glu Leu Leu Lys Asn Leu Thr Lys Tyr Pro
 1 5 10 15
 Thr Asp Arg Asp Ser Ile Trp Lys Cys Leu Lys Phe Leu Gly Ser Arg
 20 25 30
 His Pro Thr Leu Val Leu Pro Leu Val Pro Glu Leu Leu Ser Thr His
 35 40 45
 Pro Phe Phe Asp Thr Ala Glu Pro Asp Met Asp Asp Pro Ala Tyr Ile
 50 55 60
 Ala Val Leu Val Leu Ile Phe Asn Ala Ala Lys Thr Cys Pro Thr Met
 65 70 75 80
 Pro Ala Leu Phe Ser Asp His Thr Phe Arg His Tyr Ala Tyr Leu Arg
 85 90 95
 Asp Ser Leu Ser His Leu Val Pro Ala Leu Arg Leu Pro Gly Arg Lys
 100 105 110
 Leu Val Ser Ser Ala Val Ser Pro Ser Ile Ile Pro Gln Glu Asp Pro
 115 120 125
 Ser Gln Gln Phe Leu Gln Gln Ser Leu Glu Arg Val Tyr Ser Leu Gln
 130 135 140
 His Leu Asp Pro Gln Gly Ala Gln Glu Leu Leu Glu Phe Thr Ile Arg
 145 150 155 160
 Asp Leu Gln Arg Leu Gly Glu Leu Gln Ser Glu Leu Ala Gly Val Ala
 165 170 175
 Asp Phe Ser Ala Thr Tyr Leu Arg Cys Gln Leu Leu Leu Ile Lys Ala
 180 185 190

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Leu Gln Glu Lys Leu Trp Asn Val Ala Ala Pro Leu Tyr Leu Lys Gln
195 200 205

Ser Asp Leu Ala Ser Ala Ala Ala Lys Gln Ile Met Glu Glu Thr Tyr
210 215 220

Lys Met Glu Phe Met Tyr Ser Gly Val Glu Asn Lys Gln Val Val Ile
225 230 235 240

Ile His His Met Arg Leu Gln Ala Lys Ala Leu Gln Leu Ile Val
245 250 255

<210> 97
<211> 137
<212> PRT
<213> Homo sapiens

<400> 97
Arg Phe Tyr Ser Asn Ser Cys Cys Leu Cys Cys His Val Arg Thr Gly
1 5 10 15

Thr Ile Leu Leu Gly Val Trp Tyr Leu Ile Ile Asn Ala Val Val Leu
20 25 30

Leu Ile Leu Leu Ser Ala Leu Ala Asp Pro Asp Gln Tyr Asn Phe Ser
35 40 45

Ser Ser Glu Leu Gly Gly Asp Phe Glu Phe Met Asp Asp Ala Asn Met
50 55 60

Cys Ile Ala Ile Ala Ile Ser Leu Leu Met Ile Leu Ile Cys Ala Met
65 70 75 80

Ala Thr Tyr Gly Ala Tyr Lys Gln Arg Ala Ala Gly Ile Ile Pro Phe
85 90 95

Phe Cys Tyr Gln Ile Phe Asp Phe Ala Leu Asn Met Leu Val Ala Ile
100 105 110

Thr Val Leu Ile Tyr Pro Asn Ser Ile Gln Glu Tyr Ile Arg Gln Leu
115 120 125

Pro Pro Asn Phe Pro Tyr Arg Asp Asp
130 135

<210> 98
<211> 87
<212> PRT
<213> Homo sapiens

<400> 98
Phe Pro Thr Glu Met Met Ser Cys Ala Val Asn Pro Thr Cys Leu Val
1 5 10 15

Leu Ile Ile Leu Leu Phe Ile Ser Ile Ile Leu Thr Phe Lys Gly Tyr
20 25 30

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<210> 99
<211> 97
<212> PRT
<213> Homo sapiens
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<210> 100
<211> 240
<212> PRT
<213> Homo sapiens
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<400> 100
Pro Asp Ser Ala Ala Ser Leu Ser Thr Cys Ala Gly Leu Arg Gly Phe
  1                      5                      10                      15

Phe Gln Val Gly Ser Asp Leu His Leu Ile Glu Pro Leu Asp Glu Gly
          20                      25                      30

Gly Glu Gly Gly Arg His Ala Val Tyr Gln Ala Glu His Leu Leu Gln
          35                      40                      45

Thr Ala Gly Thr Cys Gly Val Ser Asp Asp Ser Leu Gly Ser Leu Leu

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50 55 60
 Gly Pro Arg Thr Ala Ala Val Phe Arg Pro Arg Pro Gly Asp Ser Leu
 65 70 75 80
 Pro Ser Arg Glu Thr Arg Tyr Val Glu Leu Tyr Val Val Val Asp Asn
 85 90 95
 Ala Glu Phe Gln Met Leu Gly Ser Glu Ala Ala Val Arg His Arg Val
 100 105 110
 Leu Glu Val Val Asn His Val Asp Lys Leu Tyr Gln Lys Leu Asn Phe
 115 120 125
 Arg Val Val Leu Val Gly Leu Glu Ile Trp Asn Ser Gln Asp Arg Phe
 130 135 140
 His Val Ser Pro Asp Pro Ser Val Thr Leu Glu Asn Leu Leu Thr Trp
 145 150 155 160
 Gln Ala Arg Gln Arg Thr Arg Arg His Leu His Asp Asn Val Gln Leu
 165 170 175
 Ile Thr Gly Val Asp Phe Thr Gly Thr Thr Val Gly Phe Ala Arg Val
 180 185 190
 Ser Ala Met Cys Ser His Ser Ser Gly Ala Val Asn Gln Asp His Ser
 195 200 205
 Lys Asn Pro Val Gly Val Ala Cys Thr Met Ala His Glu Met Gly His
 210 215 220
 Asn Leu Gly Met Asp His Asp Glu Asn Val Gln Gly Cys Arg Cys Gln
 225 230 235 240

<210> 101
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 101
 Phe Glu Ala Gly Arg Cys Ile Met Ala Arg Pro Ala Leu Ala Pro Ser
 1 5 10 15
 Phe Pro Arg Met Phe Ser Asp Cys Ser Gln Ala Tyr Leu Glu Ser Phe
 20 25 30
 Leu Glu Arg Pro Gln Ser Val Cys Leu Ala Asn Ala Pro Asp Leu Ser
 35 40 45
 His Leu Val Gly Gly Pro Val Cys Gly Asn Leu Phe Val Glu Arg Gly
 50 55 60
 Glu Gln Cys Asp Cys Gly Pro Pro Glu Asp Cys Arg Asn Arg Cys Cys

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65              70              75              80
Asn Ser Thr Thr Cys Gln Leu Ala Glu Gly Ala Gln Cys Ala His Gly
      85              90              95

Thr Cys Cys Gln Glu Cys Lys Val Lys Pro Ala Gly Glu Leu Cys Arg
      100              105              110

Pro Lys Lys Asp Met Cys
      115

<210> 102
<211> 471
<212> PRT
<213> Homo sapiens

<400> 102
Gly Ser Gln Glu Glu Arg Phe Ala Pro Gly Trp Asn Arg Asp Tyr Pro
  1              5              10              15

Pro Pro Pro Leu Lys Ser His Ala Gln Glu Arg His Ser Gly Asn Phe
      20              25              30

Pro Gly Arg Asp Ser Leu Pro Phe Asp Phe Gln Gly His Ser Gly Pro
      35              40              45

Pro Phe Ala Asn Val Glu Glu His Ser Phe Ser Tyr Gly Ala Arg Asp
      50              55              60

Gly Pro His Gly Asp Tyr Arg Gly Gly Glu Gly Pro Gly His Asp Phe
  65              70              75              80

Arg Gly Gly Asp Phe Ser Ser Ser Asp Phe Gln Ser Arg Asp Ser Ser
      85              90              95

Gln Leu Asp Phe Arg Gly Arg Asp Ile His Ser Gly Asp Phe Arg Asp
      100              105              110

Arg Glu Gly Pro Pro Met Asp Tyr Arg Gly Gly Asp Gly Thr Ser Met
      115              120              125

Asp Tyr Arg Gly Arg Glu Ala Pro His Met Asn Tyr Arg Asp Arg Asp
      130              135              140

Ala His Ala Val Asp Phe Arg Gly Arg Asp Ala Pro Pro Ser Asp Phe
      145              150              155              160

Arg Gly Arg Gly Thr Tyr Asp Leu Asp Phe Arg Gly Arg Asp Gly Ser
      165              170              175

His Ala Asp Phe Arg Gly Arg Asp Leu Ser Asp Leu Asp Phe Arg Ala
      180              185              190

Arg Glu Gln Ser Arg Ser Asp Phe Arg Asn Arg Asp Val Ser Asp Leu
      195              200              205

Asp Phe Arg Asp Lys Asp Gly Thr Gln Val Asp Phe Arg Gly Arg Gly

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210	215	220
Ser Gly Thr Thr Asp Leu Asp Phe Arg Asp Arg Asp Thr Pro His Ser 225 230 235 240		
Asp Phe Arg Gly Arg His Arg Ser Arg Thr Asp Gln Asp Phe Arg Gly 245 250 255		
Arg Glu Met Gly Ser Cys Met Glu Phe Lys Asp Arg Glu Met Pro Pro 260 265 270		
Val Asp Pro Asn Ile Leu Asp Tyr Ile Gln Pro Ser Thr Gln Asp Arg 275 280 285		
Glu His Ser Gly Met Asn Val Asn Arg Arg Glu Glu Ser Thr His Asp 290 295 300		
His Thr Ile Glu Arg Pro Ala Phe Gly Ile Gln Lys Gly Glu Phe Glu 305 310 315 320		
His Ser Glu Thr Arg Glu Gly Glu Thr Gln Gly Val Ala Phe Glu His 325 330 335		
Glu Ser Pro Ala Asp Phe Gln Asn Ser Gln Ser Pro Val Gln Asp Gln 340 345 350		
Asp Lys Ser Gln Leu Ser Gly Arg Glu Glu Gln Ser Ser Asp Ala Gly 355 360 365		
Leu Phe Lys Glu Glu Gly Gly Leu Asp Phe Leu Gly Arg Gln Asp Thr 370 375 380		
Asp Tyr Arg Ser Met Glu Tyr Arg Asp Val Asp His Arg Leu Pro Gly 385 390 395 400		
Ser Gln Met Phe Gly Tyr Gly Gln Ser Lys Ser Phe Pro Glu Gly Lys 405 410 415		
Thr Ala Arg Asp Ala Gln Arg Asp Leu Gln Asp Gln Asp Tyr Arg Thr 420 425 430		
Gly Pro Ser Glu Glu Lys Pro Ser Arg Leu Ile Arg Leu Ser Gly Val 435 440 445		
Pro Glu Asp Ala Thr Lys Glu Glu Ile Leu Asn Ala Phe Arg Thr Pro 450 455 460		
Asp Gly Met Pro Val Lys Asn 465 470		

<210> 103

<211> 125

<212> PRT

<213> Homo sapiens

<400> 103

Gly Leu Gln Asp Ser Ala Arg Gly Gly Ser Gln Glu Glu Arg Phe Ala

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<210> 104
<211> 330
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (260)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 104
Met Leu Pro Asp Trp Lys Xaa Ser Leu Ile Leu Met Ala Tyr Ile I
  1           5           10           15

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Ile	Phe	Leu	Thr	Gly	Leu	Pro	Ala	Asn	Leu	Leu	Ala	Leu	Arg	Ala	Phe
			20					25					30		
Val	Gly	Arg	Ile	Arg	Gln	Pro	Gln	Pro	Ala	Pro	Val	His	Ile	Leu	Leu
		35					40					45			
Leu	Ser	Leu	Thr	Leu	Ala	Asp	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Pro	Phe
	50					55						60			
Lys	Ile	Ile	Glu	Ala	Ala	Ser	Asn	Phe	Arg	Trp	Tyr	Leu	Pro	Lys	Val
65					70					75					80
Val	Cys	Ala	Leu	Thr	Ser	Phe	Gly	Phe	Tyr	Ser	Ser	Ile	Tyr	Cys	Ser
				85					90					95	
Thr	Trp	Leu	Leu	Ala	Gly	Ile	Ser	Ile	Glu	Arg	Tyr	Leu	Gly	Val	Ala
			100					105					110		
Phe	Pro	Val	Gln	Tyr	Lys	Leu	Ser	Arg	Arg	Pro	Leu	Tyr	Gly	Val	Ile
		115					120					125			
Ala	Ala	Leu	Val	Ala	Trp	Val	Met	Ser	Phe	Gly	His	Cys	Thr	Ile	Val
		130				135					140				
Ile	Ile	Xaa	Gln	Tyr	Leu	Asn	Thr	Thr	Glu	Gln	Val	Arg	Ser	Gly	Asn
145					150					155					160
Glu	Ile	Thr	Cys	Tyr	Glu	Asn	Phe	Thr	Asp	Asn	Gln	Leu	Asp	Val	Val
				165					170					175	
Leu	Pro	Val	Arg	Xaa	Glu	Leu	Cys	Leu	Val	Leu	Phe	Phe	Xaa	Pro	Met
			180					185					190		
Ala	Val	Thr	Ile	Phe	Cys	Tyr	Trp	Arg	Phe	Val	Trp	Ile	Met	Leu	Ser
		195					200					205			
Gln	Pro	Leu	Val	Gly	Ala	Gln	Arg	Arg	Arg	Arg	Ala	Val	Gly	Leu	Ala
		210				215					220				
Val	Val	Thr	Leu	Leu	Asn	Phe	Leu	Val	Cys	Phe	Gly	Pro	Tyr	Asn	Val
225					230					235					240
Ser	His	Leu	Val	Gly	Tyr	His	Gln	Arg	Lys	Ser	Pro	Trp	Trp	Arg	Ser
				245					250					255	
Ile	Ala	Val	Xaa	Phe	Ser	Ser	Leu	Asn	Ala	Ser	Leu	Asp	Pro	Leu	Leu
			260					265					270		
Phe	Tyr	Phe	Ser	Ser	Ser	Val	Val	Arg	Arg	Ala	Phe	Gly	Arg	Gly	Leu
		275					280					285			
Gln	Val	Leu	Arg	Asn	Gln	Gly	Ser	Ser	Leu	Leu	Gly	Arg	Arg	Gly	Lys
		290				295					300				
Asp	Thr	Ala	Glu	Gly	Thr	Asn	Glu	Asp	Arg	Gly	Val	Gly	Gln	Gly	Glu
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Gly	Met	Pro	Ser	Ser	Asp	Phe	Thr	Thr	Glu						

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 <223> Xaa equals any of the naturally occurring L-amino acids

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 Val Val Ala Pro Ser Ala Val Ala Xaa Lys Arg Pro Pro Glu Pro Thr
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 Thr Pro Trp Gln Glu Asp Pro Glu Pro Glu Asp Glu Asn Leu Tyr Glu
 35 40 45
 Lys Asn Pro Asp Ser His Gly Tyr Asp Lys Asp Pro Val Leu Asp Val
 50 55 60
 Trp Asn Met Arg Leu Val Phe Phe Phe Gly Val Ser Ile Ile Leu Val
 65 70 75 80
 Leu Gly Ser Thr Phe Val Ala Tyr Leu Pro Asp Tyr Arg Cys Thr Gly
 85 90 95
 Cys Pro Arg Ala Trp Asp Gly Met Lys Glu Trp Ser Arg Arg Glu Ala
 100 105 110
 Glu Arg Leu Val Lys Tyr Arg Glu Ala Asn Gly Leu Pro Ile Met Glu
 115 120 125
 Ser Asn Cys Phe Asp Pro Ser Lys Ile Gln Leu Pro Glu Asp Glu
 130 135 140

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 <211> 36
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 Pro Glu Lys Arg Asp Met His Asp Phe Phe Val Gly Leu Met Gly Lys
 1 5 10 15
 Arg Ser Val Gln Pro Asp Ser Pro Thr Asp Val Asn Gln Glu Asn Val
 20 25 30
 Pro Ser Phe Gly
 35

<210> 109
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 109

Lys Arg Asp Met His Asp Phe Phe Val Gly Leu Met Gly Lys Arg
 1 5 10 15

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<212> PRT

<213> Homo sapiens

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Asp Met His Asp Phe Phe Val Gly Leu Met
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<211> 16

<212> PRT

<213> Homo sapiens

<400> 111

Glu Trp Glu Ala Thr Glu Glu Met Glu Trp Ile Ile Arg Glu Ala Met
 1 5 10 15

<210> 112

<211> 35

<212> PRT

<213> Homo sapiens

<400> 112

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Trp Val Val Met Ala Val Val Val Glu Ala Val Glu Val Thr Met Gly
 20 25 30

Lys Ala Ala
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<211> 18

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<213> Homo sapiens

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 1 5 10 15

Gly Ser

<210> 114

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Asp Gly Gly Tyr Gly Gly Phe Asp Asp Tyr Gly Gly Tyr Asn Asn Tyr
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Gly Tyr Gly Asn Asp Gly Phe Asp Asp Arg Met Arg Asp Gly Arg Gly
 145 150 155 160

Met Gly Gly His Gly Tyr Gly Gly Ala Gly Asp Ala Ser Ser Gly Phe
 165 170 175

His Gly Gly His Phe Val His Met Arg Gly Leu Pro Phe Arg Ala Thr
 180 185 190

Glu Asn Asp Ile Ala Asn Phe Phe Ser Pro Leu Asn Pro Ile Arg Val
 195 200 205

His Ile Asp Ile Gly Ala Asp Gly Arg Ala Gln Glu Lys Gln Met
 210 215 220

<210> 117

<211> 26

<212> PRT

<213> Homo sapiens

<400> 117

Phe Thr His Ser Phe Ile Leu Glu His Ala Phe Ser Leu Leu Ile Thr
 1 5 10 15

Leu Pro Val Ser Ser Trp Ala Ala Asn Asn
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<211> 384

<212> PRT

<213> Homo sapiens

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<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (66)

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Gly Arg Ala Gln Ile Gly Val Val Asp Asp Glu Ala Lys Ala Pro Asp
 35 40 45

Leu Met Gln Ile Met Glu Ala Val Leu Gly Arg Arg Val Gly Xaa Leu
50 55 60

Arg Xaa Ala Thr Pro Ser Lys Asp Ile Asn Gln Leu Gln Lys Ala Asn
65 70 75 80

Val Arg Leu Tyr His Val Tyr Glu Lys Gly Lys Asp Leu Val Val Leu
85 90 95

Glu Leu Ala Thr Pro Pro Leu Thr Gln Asp Leu Leu Gln Glu Glu Asp
100 105 110

Phe Tyr Ile Leu Asp Gln Gly Gly Phe Lys Ile Tyr Val Trp Gln Gly
115 120 125

Arg Met Ser Ser Leu Gln Glu Arg Lys Ala Ala Phe Ser Arg Ala Val
130 135 140

Gly Phe Ile Gln Ala Lys Gly Tyr Pro Thr Tyr Thr Asn Val Glu Val
145 150 155 160

Val Asn Asp Gly Ala Glu Ser Ala Ala Phe Lys Gln Leu Phe Arg Thr
165 170 175

Trp Ser Glu Lys Arg Arg Arg Asn Gln Lys Xaa Gly Gly Arg Asp Lys
180 185 190

Ser Ile His Val Lys Leu Asp Val Gly Lys Leu His Thr Gln Pro Lys
195 200 205

Leu Ala Ala Gln Leu Arg Met Val Asp Asp Gly Ser Gly Lys Val Glu
210 215 220

Val	Trp	Cys	Ile	Gln	Asp	Leu	His	Arg	Gln	Pro	Val	Asp	Pro	Lys	Arg
225					230					235					240

His Gly Gln Leu Cys Ala Gly Asn Cys Tyr Leu Val Leu Tyr Thr Tyr
245 250 255

Gln Arg Leu Gly Arg Val Gln Tyr Ile Leu Tyr Leu Trp Gln Gly His
260 265 270

Gln Ala Thr Ala Asp Glu Ile Glu Ala Leu Asn Ser Asn Ala Glu Glu
275 280 285

Leu Asp Val Met Tyr Gly Gly Val Leu Val Gln Glu His Val Thr Met

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